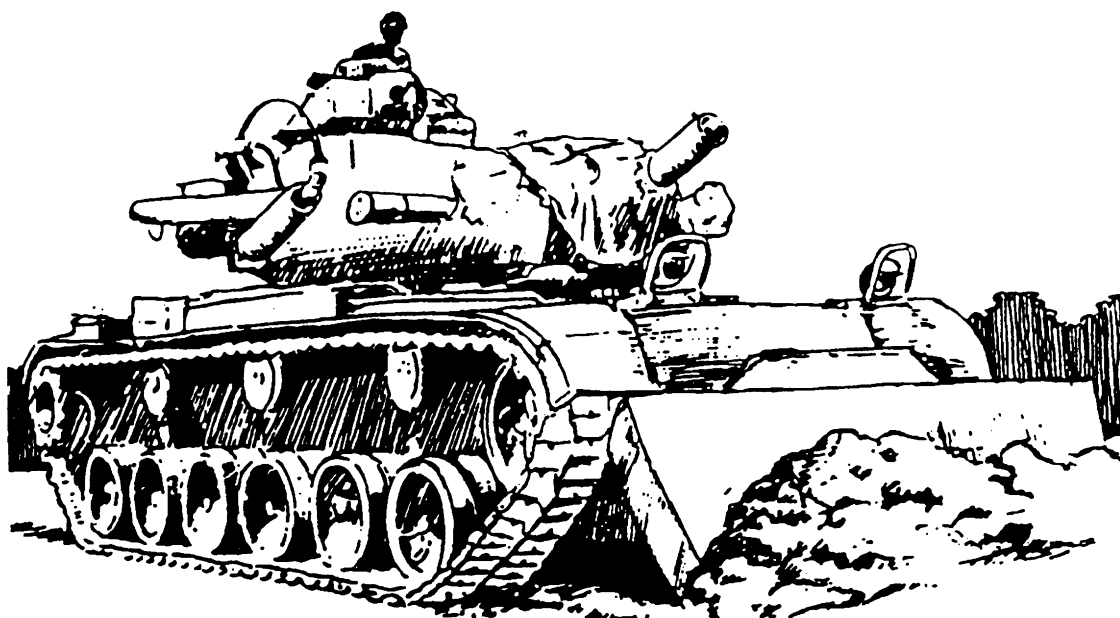


## M728 CEV



### SYSTEM IDENTIFIERS

NOMENCLATURE:	Combat Engineer Vehicle
SSN:	-----
LIN:	E56578
NSN:	2350-00-795-1797
AMIM NO:	-----
EIC:	ABF
FUEL TYPE:	DIESEL

### SYSTEM DESCRIPTION

The M728 Combat Engineer Vehicle (CEV) is on an M-60 series tank chassis. Engineering missions include preparing fighting positions and preparing and destroying obstacles. Mounted at the front of the hull is a hydraulically operated dozer blade. The M728 is equipped with an A-frame with a maximum lifting capacity of 18 tons. The two-speed winch at the rear of the turret has a maximum capacity of 13 tons. CEV armaments include a short-barrelled M57 165mm demolition gun, an M2 .50 caliber machine gun, and a 7.62mm coaxial machine gun. The crew of four consists of a commander, gunner, loader, and driver. The weight is 59 tons. The speed is 29 miles per hour. The fuel capacity is 375 gallons with a 270 mile cruising range.

The list below identifies selected components associated with the weapon/materiel system.

## M728 CEV

<b>LIN</b>	<b>NSN</b>	<b>NOMENCLATURE</b>
A01942	5820-00-938-0248	ACCESSORY KIT, MK-1302/G
A01943	5820-00-938-0247	ACCESSORY KIT, MK-1303/V
A46470	5820-00-892-3342	AMPLIFIER, AUDIO FREQ
B38070	5820-00-893-1323	BASE SHOCK MOUNT ELECTRICAL, MT-102
B67492	6650-00-863-5657	BINOCULAR, INFRARED
B67766	1240-01-207-5787	BINOCULAR, MODULAR CONS
C89070	1080-00-108-1173	CAMOUFLAGE SCREEN SUPPORT
C89145	1080-00-103-1246	CAMOUFLAGE SCREEN SYSTEM
E94970	5820-00-892-3340	CONTROL R C-2299/VRC
K93373	5830-00-856-3273	INTERCOMMUNICATION SET
L44612	1055-01-015-0874	LAUNCHER, GRENADE SMOKE
L92112	1005-00-690-2790	MACHINE GUN, .50 CALIBER
L92352	1005-00-077-2354	MACHINE GUN, 7.62MM
M35691	5855-00-790-6197	METASCOPE, AN/PAS-6
M77926	5820-00-893-1324	MOUNTING MT-1898/VRC
N04456	5855-00-150-1820	NIGHT VISION GOGGLES
Q03468	1290-00-891-9999	QUADRANT FIRE CONTROL
Q45779	5820-00-223-7412	RADIO SET, AN/VRC-12
Q53001	5820-00-223-7433	RADIO SET, AN/VRC-46
Q54174	5820-00-223-7434	RADIO SET, AN/VRC-47
Q56783	5820-00-223-7467	RADIO SET, AN/VRC-53
R25600	5820-00-892-0624	RECEIVER RADIO, R-442/VRC
R33939	5820-00-892-0622	RECEIVER-TRANSMITTER RADIO, RT-524
R44795	5820-01-151-9918	RADIO SET AN/VRC-89
R70385	4931-01-056-5332	TESTER, RECEIVER TRANSMITTER
S66941	5855-00-058-1293	SEARCHLIGHT SET, INFR
T13871	4931-00-629-3541	TEST SET, FIELD
T60156	6625-01-049-0828	TEST SET, ELECTRONIC SY
T62544	4931-01-037-9108	TEST SET, TS 3681/VSG-2
T70158	6625-00-629-3539	TEST SET, CABLE
T77181	6625-01-048-9677	TEST SET, ELECTRONIC SYSTEM
T90579	6625-00-489-7398	TEST SET, TURRET ELECTR
T93552	4931-01-046-7893	TEST SET, STABILIZATION
V74035	4925-00-339-1059	TEST SET ELECTRIC CIRCUIT
V74044	4925-00-915-5735	TEST SET ELECTRIC CIRCUIT

This summary provides an overview of FY 94 Total Army operating and support costs and other information for the weapon system. Average cost per system or per mile are displayed so the data can be used in performing analytical and cost studies. Average costs are calculated using the end item's density and activity. NET REPARABLES represent the cost with the Major Subordinate Command (MSC) specific credit rates applied (detailed in Section 1 - Overview).

<p align="center"><b>M728 CEV</b>  <b>FY 94 TOTAL ARMY COST SUMMARY</b>  <b>(FY 94 Constant Dollars)</b></p>
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<b>ACTIVITY/DENSITY</b>		<b>DEPOT END ITEM MAINTENANCE (5.061)</b>	
MILES	63,243	TOTAL	\$6,144,508
NUMBER OF SYSTEMS	218	QUANTITY COMPLETED	72
OPTEMPO (MILES/SYSTEM)	290	AVG COST/END ITEM	\$85,340.39

<b>CLASS III-POL (5.05)</b>		<b>DEPOT SECONDARY ITEM MAINTENANCE</b>	
POL	\$90,871	TOTAL	\$493,642
AVG COST/SYSTEM	\$416.84	QUANTITY COMPLETED	546
AVG COST/MILE	\$1.44	AVG COST/SECONDARY ITEM	\$904.11

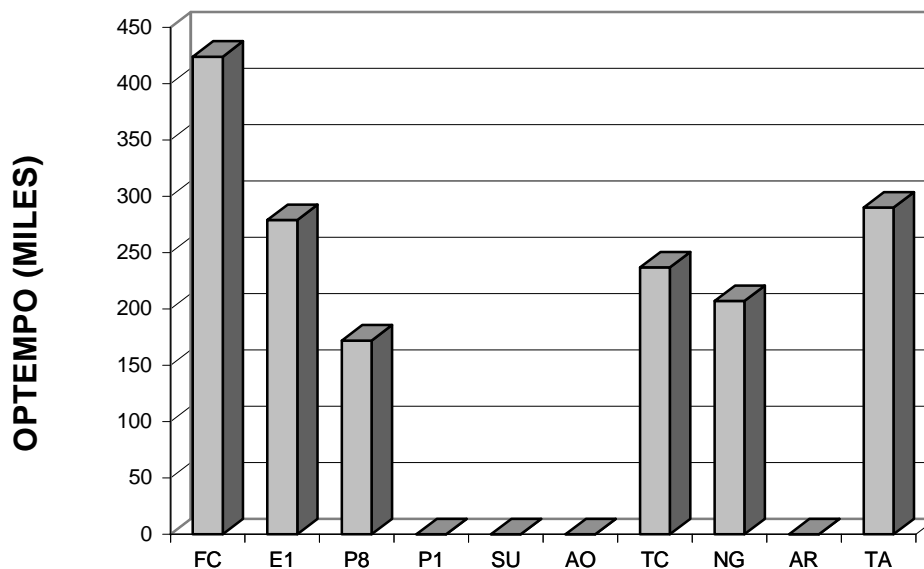
<b>CLASS V-AMMUNITION (2.11)</b>		<b>INTERMEDIATE MAINTENANCE</b>		
AMMUNITION	\$243,701		<u>DS/GS</u>	<u>CIVILIAN</u>
AVG COST/SYSTEM	\$1,117.89	MIL/CIV LABOR COST	\$81,705	\$254,104
AVG COST/MILE	\$3.85	AVG COST/SYSTEM	\$374.79	\$1,165.61
		AVG COST/MILE	\$1.29	\$4.02
		MAINTENANCE MANHOURS	4,919	12,787
		MMHs/SYSTEM	22.56	58.66
		MMHs/MILE	0.08	0.20

<b>CLASS IX MATERIEL-PARTS (5.04/5.03)</b>			
	FY 94	AVG COST	AVG COST
	<u>DOLLARS</u>	<u>PER SYSTEM</u>	<u>PER MILE</u>
CONSUMABLES	\$1,957,753	\$8,980.52	\$30.96
NET REPARABLES	\$2,155,779	\$9,888.89	\$34.09
TOTAL	\$4,113,532	\$18,869.41	\$65.04

The following graph and table display FY 94 OPTEMPO data by MACOM. ACTIVITY represents the miles recorded in The Army Maintenance Management System-Equipment Data Base (TAMMS-EDB). NUMBER OF SYSTEMS is the density recorded in the Continuing Balance System-Expanded (CBS-X). OPTEMPO is calculated by dividing ACTIVITY (Miles) by NUMBER OF SYSTEMS. The Total Army (TA) OPTEMPO is the summation of all MACOM activities (Miles) divided by the summation of all MACOM number of systems.

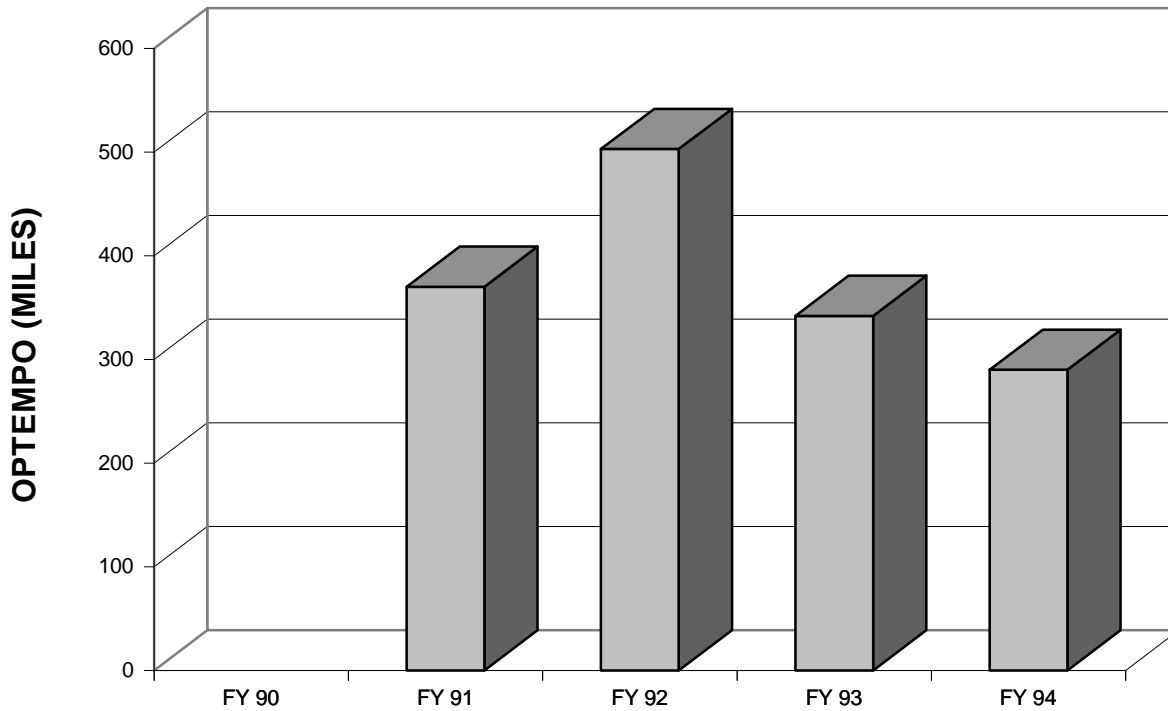
### M728 CEV



M728 CEV FY 94 MACOM OPTEMPO				
MACOM		ACTIVITY (Miles)	NUMBER OF SYSTEMS	OPTEMPO
CODE	NAME			
FC	FORSCOM	28,801	68	424
E1	USAREUR	12,018	43	279
P8	EUSA	1,892	11	172
P1	USARPAC	0	0	0
SU	USARSO	0	0	0
AO	USASOC	0	0	0
TC	TRADOC	5,214	22	237
NG	ARNG	15,318	74	207
AR	USAR	0	0	0
TA	TOTAL ARMY	63,243	218	290

The following graph and table display FY 90-94 OPTEMPO by Total Army. The Total Army ACTIVITY and NUMBER OF SYSTEMS are a summation of all the MACOMs displayed on the previous page. ACTIVITY represents the miles recorded in TAMMS-EDB. NUMBER OF SYSTEMS is the density recorded in the Continuing Balance System - Expanded (CBS-X). OPTEMPO is calculated by dividing ACTIVITY (Miles) by NUMBER OF SYSTEMS. Blank rows indicate system was not tracked in the OSMIS database during that fiscal year.

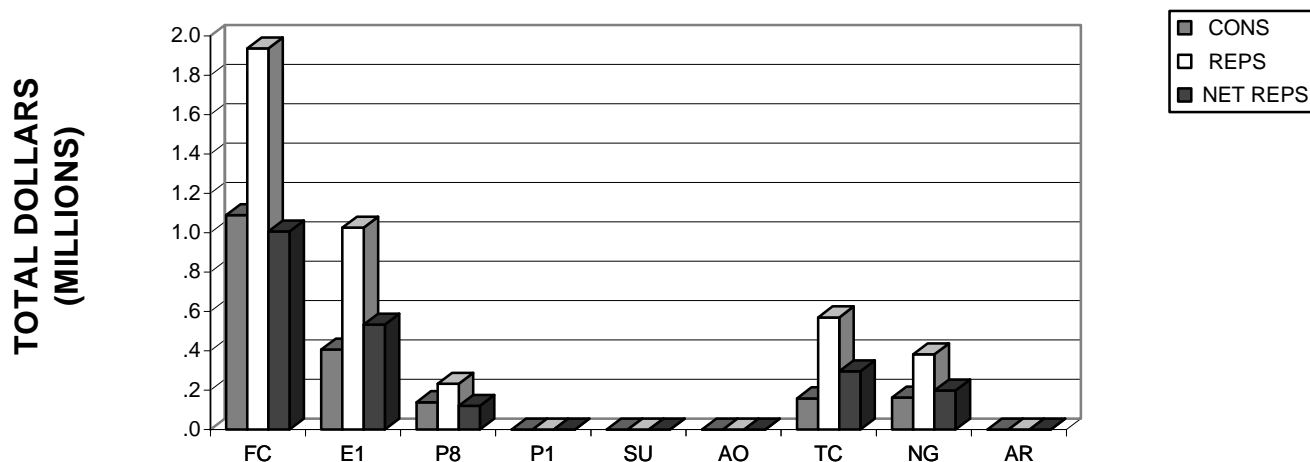
### M728 CEV



M728 CEV FIVE YEAR TOTAL ARMY OPTEMPO			
FISCAL YEAR	ACTIVITY (Miles)	NUMBER OF SYSTEMS	OPTEMPO
FY 90			
FY 91	71,351	193	370
FY 92	78,036	155	503
FY 93	74,515	218	342
FY 94	63,243	218	290

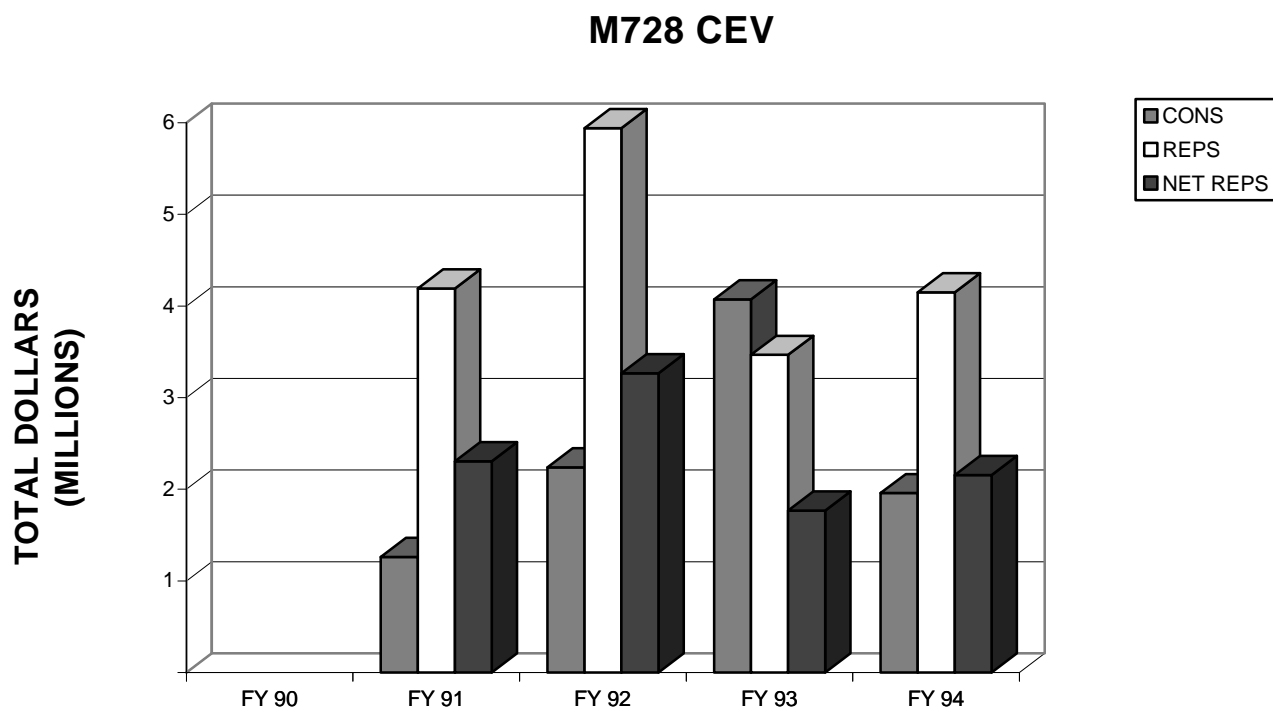
The following graph and table display FY 94 Class IX costs for consumables (CONS), reparable, (REPS), and net reparable (NET REPS) by MACOM. CONS and REPS are the total costs of requisitions recorded in the Logistic Intelligence File (LIF). NET REPS are the cost to the customer in the field and are calculated by applying an MSC-specific credit rate at the NSN level. TOTAL ARMY (TA) costs are the summation of costs across all MACOMs in the table. NET TOTAL COSTS are the sums of the costs of CONS and NET REPS. AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS by the number of systems for each MACOM. AVG PER MILE costs are calculated by dividing NET TOTAL COSTS by the activity (Miles) for each MACOM.

### M728 CEV



M728 CEV FY 94 MACOM CLASS IX COSTS							
MACOM		CONS	REPS	NET REPS	NET TOTAL COSTS	AVG PER SYSTEM	AVG PER MILE
CODE	NAME						
FC	FORSCOM	1,088,944	1,936,084	1,006,599	2,095,543	30,817	73
E1	USAREUR	406,584	1,026,162	533,427	940,011	21,861	78
P8	EUSA	139,459	233,334	121,159	260,618	23,693	138
P1	USARPAC	0	0	0	0	0	0
SU	USARSO	0	0	0	0	0	0
AO	USASOC	0	0	0	0	0	0
TC	TRADOC	159,061	570,128	295,913	454,974	20,681	87
NG	ARNG	163,705	381,969	198,681	362,386	4,897	24
AR	USAR	0	0	0	0	0	0
TA	TOTAL ARMY	1,957,753	4,147,677	2,155,779	4,113,532	18,869	65

The following graph and table display FY 90-94 Class IX costs for consumables (CONS), reparable (REPS) and net reparable (NET REPS) by Total Army. The Total Army costs are a summation of all the MACOMs displayed on the previous page. CONS and REPS are the total cost of requisitions recorded in the Logistic Intelligence File (LIF). NET REPS are the cost to the customer in the field and are calculated by applying an MSC-specific credit rate at the NSN level. NET TOTAL COSTS are the sums of the costs of CONS and NET REPS. AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS by the number of systems in the Total Army for the fiscal year. The AVG PER MILE costs are calculated by dividing NET TOTAL COSTS by the Total Army Activity for the fiscal year. Blank rows indicate system was not tracked in the OSMIS database



M728 CEV FIVE YEAR TOTAL ARMY CLASS IX COSTS						
FISCAL YEAR	CONS	REPS	NET REPS	NET TOTAL COSTS	AVG PER SYSTEM	AVG PER MILE
FY 90						
FY 91	1,261,970	4,190,972	2,305,035	3,567,005	18,482	50
FY 92	2,239,755	5,938,922	3,266,407	5,506,162	35,524	71
FY 93	4,072,374	3,466,169	1,767,747	5,840,121	26,790	78
FY 94	1,957,753	4,147,677	2,155,779	4,113,532	18,869	65

The Total Army Class IX costs from the previous pages are broken out by Work Breakdown Structure (WBS) in the following table. The FY 94 WBS Class IX costs for consumables (CONS) and reparable (REPS) are the total cost of requisitions recorded in the Logistic Intelligence File (LIF). The NET REPS are the cost to the customer in the field and are calculated by applying an MSC-specific credit rate at the NSN level. The TOTAL costs are a summation of all the WBS elements displayed in the table. NET TOTAL COSTS are the sum of the costs in CONS and NET REPS. AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS column by the total number of systems in the Army. AVG PER MILE costs are calculated by dividing the NET TOTAL COSTS by the total activity (Miles) for the entire Army.

<b>M728 CEV</b> <b>FY 94 TOTAL ARMY WORK BREAKDOWN STRUCTURE COSTS</b>							
WBS	NAME	CONS	REPS	NET REPS	NET TOTAL COSTS	AVG PER SYSTEM	AVG PER MILE
01	HULL/FRAME	272,540	82,893	43,127	315,667	1,448	5
02	SUSPENSION/STEER	71,524	360,533	187,113	258,637	1,186	4
03	POWER PACKAGE	757,917	3,309,420	1,717,587	2,475,504	11,356	39
04	AUX AUTOMOTIVE	146,936	32,537	17,049	163,985	752	3
05	TURRET ASSEMBLY	45,793	125	65	45,858	210	1
06	FIRE CONTROL	94,908	108,465	57,176	152,084	698	2
07	ARMAMENT	297,002	199,453	104,515	401,517	1,842	6
08	BODY/CAB	0	0	0	0	0	0
09	AUTO LOADING	0	0	0	0	0	0
10	AUTO/REMOTE PILOT	0	0	0	0	0	0
11	NBC EQUIPMENT	11,307	0	0	11,307	52	0
12	SPECIAL EQUIPMENT	0	0	0	0	0	0
13	NAVIGATION	0	0	0	0	0	0
14	COMMUNICATIONS	69,821	34,111	18,694	88,515	406	1
15	VEH APP SOFTWARE	0	0	0	0	0	0
16	VEH SYS SOFTWARE	0	0	0	0	0	0
17	INT, ASSY, TEST, C/O	0	0	0	0	0	0
18	OTHER	190,005	20,140	10,453	200,458	920	3
	TOTAL	1,957,753	4,147,677	2,155,779	4,113,532	18,869	65



The following table displays FY 90-94 Class IX costs by Work Breakdown Structure (WBS) for the Total Army. NET TOTAL COSTS are summation for all the WBS elements displayed on the previous page and are a sum of the costs of CONS and NET REPS. AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS by the total number of systems in the Army for the fiscal year. AVG PER MILE costs are calculated by dividing NET TOTAL COSTS by the total activity (miles) for the Total Army in the fiscal year. Blank columns indicate system was not tracked in the OSMIS database during that fiscal year.

<b>M728 CEV</b>						
<b>FIVE YEAR TOTAL ARMY WORK BREAKDOWN STRUCTURE COSTS</b>						
<b>WBS</b>	<b>NAME</b>	<b>FY 90 NET TOTAL COSTS</b>	<b>FY 91 NET TOTAL COSTS</b>	<b>FY 92 NET TOTAL COSTS</b>	<b>FY 93 NET TOTAL COSTS</b>	<b>FY 94 NET TOTAL COSTS</b>
01	HULL/FRAME		307,900	546,974	510,757	315,667
02	SUSPENSION/STEER		623,104	413,525	694,975	258,637
03	POWER PACKAGE		1,821,778	3,416,578	3,278,055	2,475,504
04	AUX AUTOMOTIVE		50,668	99,927	147,517	163,985
05	TURRET ASSEMBLY		28,119	71,737	60,048	45,858
06	FIRE CONTROL		252,667	257,600	176,187	152,084
07	ARMAMENT		291,525	328,107	501,298	401,517
08	BODY/CAB		0	0	0	0
09	AUTO LOADING		0	0	0	0
10	AUTO/REMOTE PILOT		0	0	0	0
11	NBC EQUIPMENT		6,747	11,995	20,487	11,307
12	SPECIAL EQUIPMENT		0	0	0	0
13	NAVIGATION		0	0	0	0
14	COMMUNICATIONS		30,111	56,822	108,606	88,515
15	VEH APP SOFTWARE		0	0	0	0
16	VEH SYS SOFTWARE		0	0	0	0
17	INT, ASSY, TEST, C/O		0	0	0	0
18	OTHER		154,386	302,897	342,191	200,458
	TOTAL		3,567,005	5,506,162	5,840,121	4,113,532
	AVG PER SYSTEM		18,482	35,524	26,790	18,869
	AVG PER MILE		50	71	78	65

**M728 CEV**  
**TOP 40 COST DRIVERS**  
**CLASS IX CONSUMABLES (NON-DLRs)**

	NSN	NOMENCLATURE	WBS	MRC	ARI	MATCAT	FY 94 AMDF UNIT PRICE	FY 94 QTY
1.	3040009079024	CYLINDER ASSEMBLY AC	03K	F		M21JP	3,006.00	29.00
2.	2520006219567	TRAVERSE GEAR BOX A	03H	F		J2100	4,957.00	17.00
3.	1025001272976	OBTURATOR-SHIM SET	07A	Z		M22JP	1,493.00	52.00
4.	2520011596214	TRANSMISSION WITH C	03H	H		K21WB	62,282.00	1.17
5.	6140012101964	BATTERY,STORAGE	18	F		K21PU	57.22	1,268.80
6.	2590011303677	WINCH,PLANETARY	04E	F		M21JV	9,948.00	6.54
7.	2520001074227	MANIFOLD ASSEMBLY,	03D	F		J2100	5,409.26	10.00
8.	5855010271554	TUBE AND MAGNIFIER	06E	Z		G22SY	2,481.00	15.63
9.	2910010730124	PUMP,FUEL,METERING	03A	H		K21JT	3,681.00	7.39
10.	6105010144669	MOTOR,DIRECT CURREN	04A	Z		J2200	1,760.45	15.27
11.	2815003973316	PISTON,INTERNAL COM	03A	Z		K22JT	145.00	174.30
12.	5855010343845	IMAGE INTENSIFIER,N	06E	Z		G22SZ	1,274.00	17.30
13.	3040007223536	HEAD,HYDRAULIC MOTO	03K	H		K21JT	817.00	25.77
14.	1005006085002	BARREL ASSEMBLY,GUN,	07C	Z		M22HJ	735.00	26.63
15.	2530001505895	TRACK SHOE SET,VEHI	02B	Z		K22WB	15.37	1,234.80
16.	2815002130835	CYLINDER HEAD,DIESE	03A	H	D	K21JT	792.00	22.95
17.	1025010724964	TUBE,CANNON	07A	Z		M22JP	17,375.00	1.00
18.	4010001074262	WIRE ROPE ASSEMBLY,	18	Z		J2200	614.59	27.00
19.	2590009078969	CYLINDER ASSEMBLY AC	01H	F		K21JP	674.00	24.00
20.	2590011166094	RACK,AMMUNITION STO	01H	F		J2200	1,999.00	8.00
21.	2510001795526	SHOCK ABSORBER DIREC	02G	O		K21JT	134.00	108.05
22.	2940011428260	FILTER ELEMENT,INTA	03A	Z		K22WB	129.00	112.10
23.	2590009078970	CYLINDER ASSEMBLY AC	01H	F		K21JP	934.00	15.39
24.	5960008923808	ELECTRON TUBE	14	Z		Q22RB	80.48	160.86
25.	1015010643375	CONTROL ASSEMBLY,GU	07A	F		M21JJ	2,742.00	4.71
26.	2940009032577	FILTER,FLUID	03A	O		J2100	989.79	13.00
27.	1005004634616	BARREL ASSEMBLY,GUN,	07C	F		M21HB	1,137.00	11.26
28.	1005008570017	CARRIER,BOLT	07C	F		M21HB	2,642.00	4.80
29.	3120006783230	BEARING HALF SET,SL	01H	Z		K22JT	376.00	31.40
30.	2530008712855	ARM ASSEMBLY,PIVOT,	03Q	Z		K22WB	894.00	12.27
31.	1015001780726	ADAPTER ASSEMBLY,GE	07A	F		J2100	3,581.67	3.00
32.	3020007715620	GEAR CLUSTER	03H	Z		J2200	659.00	16.04
33.	2910010374984	NOZZLE,FUEL INJECTI	03A	F		K21JT	180.00	58.50
34.	2815004101248	RING SET,PISTON	03A	Z		K22JT	81.02	124.18
35.	2530007364134	HUB TRACK SPROCKE	02B	Z		K22JT	809.00	11.92
36.	2910000646262	NOZZLE,FUEL INJECTI	03A	Z		J2200	12.98	724.22
37.	2815004101211	RING SET,PISTON	03A	Z		K22JT	58.08	161.19
38.	6110000688491	BOX ASSEMBLY	05E	F		M21JP	1,566.00	5.92
39.	3020001253861	GUARD CYLINDER ACTUA	03H	Z		K22JP	2,219.00	4.00
40.	4330005164624	FILTER ASSEMBLY,FLU	18	Z		J2200	184.52	46.26

NUMBER OF SYSTEMS	218
MILES	63,243

NOTE: ROWS MAY NOT CALCULATE DUE TO ROUNDING

**M728 CEV**  
**CONSUMABLES (NON-DLRs)**

EXTENDED COST (QTY * UNIT PRICE)	AVERAGE COST		AVERAGE QUANTITY		FY 91-94 FOUR YEAR AVERAGE	
	PER	PER	PER	PER	QTY	EXTENDED COST
	SYSTEM	MILE	100 SYSTEMS	100 MILES		
87,174	399.88	1.38	13.3028	0.0459	20.75	62,375
84,269	386.56	1.33	7.7982	0.0269	7.75	38,417
77,636	356.13	1.23	23.8532	0.0822	57.25	85,474
72,870	334.27	1.15	0.5367	0.0019	3.49	217,208
72,600	333.03	1.15	582.0183	2.0062	890.60	50,960
65,060	298.44	1.03	3.0000	0.0103	2.49	24,746
54,093	248.13	0.86	4.5872	0.0158	18.75	101,424
38,778	177.88	0.61	7.1697	0.0247	8.48	21,026
27,203	124.78	0.43	3.3899	0.0117	5.11	18,819
26,882	123.31	0.43	7.0046	0.0241	8.23	14,480
25,274	115.94	0.40	79.9541	0.2756	94.63	13,721
22,040	101.10	0.35	7.9358	0.0274	10.23	13,027
21,054	96.58	0.33	11.8211	0.0407	14.90	12,173
19,573	89.78	0.31	12.2156	0.0421	13.64	10,024
18,980	87.06	0.30	566.4220	1.9525	2,339.05	35,951
18,176	83.38	0.29	10.5275	0.0363	10.53	8,336
17,375	79.70	0.27	0.4587	0.0016	2.75	47,781
16,594	76.12	0.26	12.3853	0.0427	25.50	15,672
16,176	74.20	0.26	11.0092	0.0379	18.61	12,545
15,992	73.36	0.25	3.6697	0.0126	11.25	22,489
14,478	66.41	0.23	49.5642	0.1708	128.65	17,239
14,461	66.33	0.23	51.4220	0.1773	114.84	14,814
14,374	65.94	0.23	7.0596	0.0243	27.21	25,416
12,946	59.39	0.20	73.7890	0.2544	133.94	10,779
12,915	59.24	0.20	2.1606	0.0074	3.54	9,700
12,868	59.03	0.20	5.9633	0.0206	18.50	18,311
12,803	58.73	0.20	5.1651	0.0178	5.83	6,623
12,682	58.17	0.20	2.2018	0.0076	4.51	11,922
11,807	54.16	0.19	14.4037	0.0496	11.64	4,376
10,969	50.32	0.17	5.6284	0.0194	12.99	11,611
10,745	49.29	0.17	1.3761	0.0047	1.00	3,582
10,571	48.49	0.17	7.3578	0.0254	5.00	3,295
10,530	48.30	0.17	26.8349	0.0925	28.58	5,144
10,061	46.15	0.16	56.9633	0.1964	85.43	6,921
9,644	44.24	0.15	5.4679	0.0188	15.00	12,135
9,400	43.12	0.15	332.2110	1.1451	430.93	5,593
9,361	42.94	0.15	73.9404	0.2549	101.80	5,913
9,271	42.53	0.15	2.7156	0.0094	8.61	13,487
8,876	40.72	0.14	1.8349	0.0063	1.75	3,883
8,537	39.16	0.13	21.2202	0.0731	19.98	3,686

1,025,098	52.4%	TOP 40
932,655	47.6%	OTHERS
=====		
1,957,753		TOTAL

**M728 CEV**  
**TOP 40 COST DRIVERS**  
**CLASS IX REPARABLES (DLRs)**

	NSN	NOMENCLATURE	WBS	MRC	ARI	MATCAT	FY 94 AMDF UNIT PRICE		FY 94 QTY
							W/O CREDIT	W/CREDIT	
1.	2815011662051	ENGINE AND CONTAIN	03A	H	R	K21WB	117,311.00	60,884.41	14.96
2.	2520000867792	XMSN MDL CD850-6A	03H	H	R	K21WB	68,625.00	35,616.38	19.13
3.	2530001505897	TRACK SHOE VEHICUI	02B	D		K21WB	158.00	82.00	1,288.70
4.	1015008717195	SLIPRING ASSEMBLY I	07A	D	C	M21JP	8,331.00	4,365.44	22.00
5.	2530012783737	TRACK SHOE ASSEME	02B	D		K21WB	1,274.00	661.21	119.11
6.	2920008306660	GENERATOR	03A	F	R	K21JT	1,928.00	1,000.63	35.94
7.	2520009078971	CLUTCH MAGNETIC	03J	F	R	K21JP	1,562.00	810.68	35.14
8.	1240001487555	ELBOW ASSEMBLY	06E	D		M21JH	4,910.00	2,572.84	9.17
9.	2520010581161	FINAL DRIVE ASSEMBI	03N	D		K21WB	5,283.00	2,741.88	7.68
10.	6105010953087	MOTOR,DIRECT CURR	04A	F	R	M21KF	1,463.00	766.61	21.28
11.	2540011695159	HEATER,VEHICULAR,C	01H	F	C	K21MC	1,474.00	765.01	21.10
12.	2520010229748	CONTROL ASSEMBLY,	03H	D	D	K21WB	1,820.00	944.58	15.74
13.	3110008369961	RETAINER AND BALLS	01H	D		M21JJ	9,808.00	5,139.39	1.86
14.	2540011623834	HEATER,VEHICULAR,C	01H	F	C	K21MC	1,424.00	739.06	11.69
15.	1240010056036	PERISCOPE,ARMOREI	06E	D	C	M21JJ	1,649.00	864.08	9.55
16.	4820007101769	VALVE,LINEAR,DIREC	01A	D	D	K21JP	1,910.00	991.29	8.00
17.	4320009079025	PUMP ROTARY POWEI	18	D	D	K21JP	814.00	422.47	16.00
18.	2815002130834	CYLINDER HEAD,DIES	03A	H	R	K21JT	695.00	360.71	16.90
19.	1025007545289	EQUILIBRATOR,CANN	07A	F	C	M21JP	919.00	481.56	10.00
20.	1265010194548	CONTROL,COMMANDE	06H	D		M21JH	32,809.00	17,191.92	0.28
21.	5820010928067	POWER SUPPLY ASSE	14	D	E	G21RB	505.00	276.74	16.08
22.	2815012339709	CRANKSHAFT,ENGINE	03A	D		K21WB	7,017.00	3,641.82	1.12
23.	2530010424047	ARM ASSEMBLY,PIVO	03Q	D		K21WB	801.00	415.72	8.73
24.	2910009334628	TANK,FUEL,ENGINE	03A	D		K21WB	2,921.00	1,516.00	2.35
25.	1240009809291	PERISCOPE TANK M36	06E	D		M21JJ	5,194.00	2,721.66	1.15
26.	2530006794495	BRAKE BAND AND LIN	03Q	D	R	K21WB	372.00	193.07	16.16
27.	1240009383047	BODY ASSEMBLY,PER	06E	D		M21JP	2,875.00	1,506.50	2.00
28.	5895000870061	RECEIVER SUBASSEM	14	D	D	G21RT	571.00	312.91	9.30
29.	1240011229998	HEAD ASSEMBLY,TAN	06E	D		M21JP	5,303.00	2,778.77	1.00
30.	2530007013976	WHEEL SOLID RUBBEI	02A	D		K21JT	186.00	96.53	27.80
31.	5820008842492	SUBASSY	14	L		G21RT	685.00	375.38	6.99
32.	1090008595972	GRIP ASSEMBLY,CON	07D	F	R	M21JJ	739.00	387.24	6.50
33.	4320007707909	PUMP,ROTARY	18	D		K21WB	269.00	139.61	15.88
34.	5855010960871	VIEWER,NIGHT VISION	06E	H	E	G21SY	5,301.00	2,904.95	0.73
35.	5855010694014	SCANNER,MECHANIC/	06E	D		G21SV	2,548.00	1,396.30	1.42
36.	5895010298729	PREAMPLIFIER,VIDEO	14	D	C	G21SV	158.00	86.58	19.26
37.	5820009061115	MATCHING UNIT-BASE	14	D		G21RT	178.00	97.54	15.53
38.	5855010549014	COOLER,CRYOGENIC,	06E	D	R	G21SV	2,416.00	1,323.97	1.04
39.	4320008712834	PUMP UNIT,CENTRIFU	18	F	C	K21JT	694.00	360.19	3.77
40.	1240001339294	BODY ASSEMBLY U/O	06E	D		M21JH	2,522.00	1,321.53	0.95

NUMBER OF SYSTEMS	218
MILES	63,243

NOTE: ROWS MAY NOT CALCULATE DUE TO ROUNDING

**M728 CEV  
REPARABLES (DLRs)**

EXTENDED COST W/CREDIT (QTY * UNIT PRICE)	AVERAGE COST (W/CREDIT)		AVERAGE QUANTITY		FY 91-94 FOUR YEAR AVERAGE	
	PER SYSTEM	PER MILE	PER 100 SYSTEMS	PER 100 MILES	QTY	EXTENDED COST (W/CREDIT)
910,830	4,178.12	14.40	6.8624	0.0237	14.74	897,284
681,341	3,125.42	10.77	8.7752	0.0302	20.29	722,567
105,673	484.74	1.67	591.1468	2.0377	1,668.93	136,852
96,039	440.55	1.52	10.0917	0.0348	11.25	49,111
78,756	361.27	1.25	54.6376	0.1883	263.78	174,411
35,963	164.97	0.57	16.4862	0.0568	24.99	25,003
28,488	130.68	0.45	16.1193	0.0556	55.54	45,023
23,593	108.22	0.37	4.2064	0.0145	11.79	30,327
21,058	96.60	0.33	3.5229	0.0121	9.43	25,842
16,313	74.83	0.26	9.7615	0.0336	11.83	9,065
16,142	74.05	0.26	9.6789	0.0334	15.53	11,877
14,868	68.20	0.24	7.2202	0.0249	5.44	5,136
9,559	43.85	0.15	0.8532	0.0029	3.21	16,510
8,639	39.63	0.14	5.3624	0.0185	13.93	10,291
8,251	37.85	0.13	4.3807	0.0151	5.89	5,087
7,930	36.38	0.13	3.6697	0.0126	7.25	7,187
6,760	31.01	0.11	7.3394	0.0253	25.25	10,667
6,096	27.96	0.10	7.7523	0.0267	10.23	3,688
4,816	22.09	0.08	4.5872	0.0158	7.75	3,732
4,814	22.08	0.08	0.1284	0.0004	0.83	14,183
4,450	20.41	0.07	7.3761	0.0254	8.28	2,290
4,079	18.71	0.06	0.5138	0.0018	0.78	2,822
3,629	16.65	0.06	4.0046	0.0138	18.19	7,561
3,563	16.34	0.06	1.0780	0.0037	4.09	6,197
3,130	14.36	0.05	0.5275	0.0018	2.54	6,906
3,120	14.31	0.05	7.4128	0.0256	9.79	1,890
3,014	13.83	0.05	0.9174	0.0032	1.50	2,260
2,909	13.34	0.05	4.2661	0.0147	7.08	2,214
2,779	12.75	0.04	0.4587	0.0016	1.25	3,473
2,684	12.31	0.04	12.7523	0.0440	94.20	9,093
2,625	12.04	0.04	3.2064	0.0111	5.50	2,065
2,517	11.55	0.04	2.9817	0.0103	2.38	920
2,217	10.17	0.04	7.2844	0.0251	4.98	695
2,121	9.73	0.03	0.3349	0.0012	0.94	2,723
1,982	9.09	0.03	0.6514	0.0022	0.85	1,187
1,667	7.65	0.03	8.8349	0.0305	12.81	1,109
1,515	6.95	0.02	7.1239	0.0246	12.64	1,233
1,377	6.32	0.02	0.4771	0.0016	0.26	348
1,358	6.23	0.02	1.7294	0.0060	2.94	1,058
1,255	5.76	0.02	0.4358	0.0015	2.24	2,957

2,137,920	99.2%	TOP 40
17,859	0.8%	OTHERS
=====		
2,155,779		TOTAL

The following table summarizes FY 94 Depot Maintenance Costs from the Master File Maintenance (MFM). Depot maintenance costs are displayed by cost elements for end item maintenance and secondary item maintenance. The OTHER cost columns represent work categories such as progressive maintenance, renovation, and fabrication/manufacture. For reporting purposes, TRANSPORTATION costs recorded in the World Aircraft Logistics Conference (WALC)/Special Aircraft Assignment Mission (SAAM) records are shown in the OTHER maintenance category.

M728 CEV							
FY 94 DEPOT MAINTENANCE COSTS							
COST ELEMENTS	END ITEM MAINTENANCE				SECONDARY ITEM MAINTENANCE		
	REPAIR	OVERHAUL	OTHER	MODIFICATION	REPAIR	OVERHAUL	OTHER
CIVILIAN LABOR	1,458,972	252,737	44,507	0	66,126	45,349	593
MILITARY LABOR	0	0	0	0	0	0	0
MATERIEL	1,428,131	241,760	521,577	0	39,156	97,049	462
TRANSPORTATION	0	0	0	0			
OVERHEAD	1,813,219	302,619	69,286	0	103,717	66,346	541
CONTRACT	0	0	0	0	0	0	0
OTHER	10,467	910	323	0	74,036	260	7
TOTAL	4,710,789	798,026	635,693	0	283,035	209,004	1,603
QTY COMPLETED	33	6	33	0	240	287	19
AVG COST	142,751	133,004	19,263	0	1,179	728	84

The table below summarizes FY 94 Intermediate Maintenance Costs from the Work Order Logistics File (WOLF) data. The labor hours and labor costs for Direct Support/General Support Intermediate Maintenance (DS/GS) and Civilian Maintenance are displayed by MACOM and Total Army. MACOM DS/GS LABOR COSTS are calculated by multiplying MACOM labor hours by the Army Manpower Cost System (AMCOS) E-5 composite standard rate (\$16.61). CIVILIAN LABOR COSTS are a summation from the source data.

M728 CEV					
FY 94 INTERMEDIATE MAINTENANCE COSTS					
MACOM	DS/GS LABOR HOURS	DS/GS LABOR COSTS	CIVILIAN LABOR HOURS*	CIVILIAN LABOR COSTS*	CIVILIAN LABOR COST/HOUR
FORSCOM	1,149	19,085	12,598	250,135	19.86
USAREUR	831	13,803			
EUSA	127	2,109			
USARPAC	0	0			
USARSO	0	0			
USASOC	0	0			
TRADOC	0	0	189	3,969	21.00
ARNG	2,719	45,163			
USAR	93	1,545			
TOTAL ARMY	4,919	81,705	12,787	254,104	19.87

\*TRADOC LABOR HOURS and LABOR COSTS include contractor hours and costs.

The following table summarizes FY 90-94 Depot Maintenance Costs. The depot maintenance data are recorded in MFM. FY 94 costs are a summation of the cost elements displayed on the previous page. END ITEM OVERHEAD costs were not separately identified prior to FY 92. TRANSPORTATION costs are recorded in the WALC/SAAM records. Blank columns indicate system was not tracked in the OSMIS database during that fiscal year.

<b>M728 CEV</b>										
<b>FIVE YEAR DEPOT MAINTENANCE COSTS</b>										
COST ELEMENTS	END ITEM MAINTENANCE					SECONDARY ITEM MAINTENANCE				
	FY 90	FY 91	FY 92	FY 93	FY 94	FY 90	FY 91	FY 92	FY 93	FY 94
CIVILIAN LABOR		0	316,288	923,499	1,756,216		0	399,937	88,855	112,068
MILITARY LABOR		0	0	0	0		0	0	0	0
MATERIEL		0	631,310	1,707,085	2,191,468		0	1,091,026	75,765	136,667
TRANSPORTATION		0	0	0	0					
OVERHEAD		0	439,970	1,278,809	2,185,124		0	597,267	129,051	170,604
CONTRACT		0	0	0	0		0	0	0	0
OTHER		0	20,501	742	11,700		0	45,855	39,479	74,303
TOTAL		0	1,408,069	3,910,135	6,144,508		0	2,134,085	333,150	493,642
QTY COMPLETED		0	5	21	72		0	9,127	1,385	546
AVG COST		0	281,614	186,197	85,340		0	234	240	904

The table below summarizes FY 90-94 Intermediate Maintenance Costs from WOLF. The fiscal year total costs for Direct/General Support Intermediate Maintenance (DS/GS) and Civilian Maintenance are displayed by MACOM and Total Army. MACOM DS/GS labor costs are calculated by multiplying MACOM labor hours by the Army Manpower Cost System (AMCOS) E-5 composite standard rate. DS/GS COST PER HR is the E-5 composite standard rate in FY 94 constant dollars. CIVILIAN LABOR COSTS are a summation from the source data. Blank columns indicate system was not tracked in the OSMIS database during that fiscal year.

<b>M728 CEV</b>										
<b>FIVE YEAR INTERMEDIATE MAINTENANCE COSTS</b>										
MACOM	DIRECT/GENERAL SUPPORT INTERMEDIATE MAINTENANCE (DS/GS)					CIVILIAN MAINTENANCE (CIV)				
	FY 90	FY 91	FY 92	FY 93	FY 94	FY 90	FY 91	FY 92	FY 93	FY 94
FORSCOM		0	37,409	21,881	19,085		0	3,266	11,743	250,135
USAREUR		0	18,339	7,476	13,803					
EUSA		0	1,526	861	2,109					
USARPAC		0	0	0	0					
USARSO		0	0	0	0					
USASOC		0	0	0	0					
TRADOC		0	0	0	0		0	20,669	45,752	3,969
ARNG		0	54,953	49,693	45,163					
USAR		0	0	0	1,545					
TOTAL ARMY		0	112,227	79,911	81,705		0	23,935	57,495	254,104
LABOR HRS		0	6,664	4,649	4,919		0	1,218	2,759	12,787
COST PER HR		0.00	16.84	17.19	16.61		0.00	19.65	20.84	19.87

The following list shows the FY 94 Secondary Item - Rebuilds/Overhauls Cost Drivers recorded in the MFM. AVG COST TO REBUILD/OVERHAUL is calculated by dividing the costs in FY 94 TOTAL COST TO REBUILD/OVERHAUL by FY 94 QTY COMPLETED.

<b>M728 CEV</b> <b>FY 94 DEPOT SECONDARY ITEM MAINTENANCE - REBUILDS/OVERHAULS</b> <b>COST DRIVERS</b>					
NSN	NOMENCLATURE	FY 94 AMDF PRICE	FY 94 TOTAL COST TO REBUILD/ OVERHAUL	FY 94 QTY COMPLETED	AVG COST TO REBUILD/ OVERHAUL
2815-01-166-2051	ENGINE AND CONTA	117,311	91,999	2	46,000
1240-00-987-3217	PERISCOPE SUBASS	467	27,141	25	1,086
2530-00-679-4495	BRAKE BAND AND L	372	22,923	60	382
2920-00-830-6660	GENERATOR	1,928	21,096	37	570
6105-01-093-2817	MOTOR ASSEMBLY	1,463	11,389	17	670
2815-00-394-9729	ENGINE BLOCK,DIE	8,343	9,619	9	1,069
2530-00-701-3976	WHEEL SOLID RUBB	186	4,589	35	131
1015-00-871-7195	SLIPRING ASSEMBL	8,331	4,473	4	1,118
2940-01-035-9827	AIR CLEANER,INTA	2,020	4,105	4	1,026
5977-00-909-2473	RING,ELECTRICAL	7,904	2,202	3	734

The following list shows the FY 94 Secondary Item Maintenance - Repairs Cost Drivers recorded in MFM. AVG COST TO REPAIR is calculated by dividing the costs in FY 94 TOTAL COST TO REPAIR by FY 94 QTY COMPLETED.

<b>M728 CEV</b> <b>FY 94 DEPOT SECONDARY ITEM MAINTENANCE - REPAIRS</b> <b>COST DRIVERS</b>					
NSN	NOMENCLATURE	FY 94 AMDF PRICE	FY 94 TOTAL COST TO REPAIR	FY 94 QTY COMPLETED	AVG COST TO REPAIR
2590-01-331-1939	RAKE MINE CLEARI	50,000	164,835	11	14,985
8145-00-856-8147	SHIPPING AND STO	3,195	39,860	21	1,898
1015-00-300-5395	CYLINDER,REPLENI	292	36,011	138	261
1090-00-859-5972	GRIP ASSEMBLY,CO	739	14,918	27	553
2540-01-162-3834	HEATER,VEHICULAR	1,424	10,402	15	693
1240-01-005-6036	PERISCOPE,ARMORE	1,649	8,048	13	619
2540-01-169-5159	HEATER,VEHICULAR	1,474	6,302	8	788
1025-00-754-5289	EQUILIBRATOR,CAN	919	1,923	4	481
2920-01-054-0479	REGULATOR,ENGINE	281	736	3	245



The following list shows the FY 90-94 Secondary Item - Rebuild/Overhauls Cost Drivers recorded in MFM. These five year Cost Drivers were revised from previous years' report, see Appendix A, Section 15 for further explanation. AVG COST TO REBUILD/OVERHAUL is calculated by dividing the costs in FY 90-94 TOTAL COST TO REBUILD/OVERHAUL by FY 90-94 QTY COMPLETED.

<b>M728 CEV</b> <b>FIVE YEAR DEPOT SECONDARY ITEM MAINTENANCE - REBUILDS/OVERHAULS</b> <b>COST DRIVERS</b>					
NSN	NOMENCLATURE	FY 94 AMDF PRICE	FY 90-94 TOTAL COST TO REBUILD/ OVERHAUL	FY 90-94 QTY COMPLETED	AVG COST TO REBUILD/ OVERHAUL
2530-00-150-5897	TRACK SHOE VEHIC	158	987,807	8,308	119
2520-00-086-7792	XMSN MDL CD850-6	68,625	527,736	43	12,273
2815-01-166-2051	ENGINE AND CONTA	117,311	380,207	11	34,564
1240-00-148-7555	ELBOW ASSEMBLY	4,910	122,126	40	3,053
2520-01-058-1161	FINAL DRIVE ASSE	5,283	92,521	34	2,721
2530-00-679-4495	BRAKE BAND AND L	372	71,041	301	236
2815-00-394-9729	ENGINE BLOCK,DIE	8,343	42,364	31	1,367
2530-00-871-2855	ARM ASSEMBLY,PIV	894	40,234	44	914
2940-01-035-9827	AIR CLEANER,INTA	2,020	38,056	29	1,312
1015-01-006-0621	CONTROL BOX,ELEC	786	32,447	83	391

The following list shows the FY 90-94 Secondary Item - Repairs Cost Drivers recorded in MFM. These five year Cost Drivers were revised from previous years' report, see Appendix A, Section 15 for further explanation. AVG COST TO REPAIR is calculated by dividing the costs in FY 90-94 TOTAL COST TO REPAIR by FY 90-94 QTY COMPLETED.

<b>M728 CEV</b> <b>FIVE YEAR DEPOT SECONDARY ITEM MAINTENANCE - REPAIRS</b> <b>COST DRIVERS</b>					
NSN	NOMENCLATURE	FY 94 AMDF PRICE	FY 90-94 TOTAL COST TO REPAIR	FY 90-94 QTY COMPLETED	AVG COST TO REPAIR
2590-01-331-1939	RAKE MINE CLEARI	50,000	164,835	11	14,985
8145-00-856-8147	SHIPPING AND STO	3,195	43,763	28	1,562
1015-00-300-5395	CYLINDER,REPLENI	292	42,310	173	245
1090-00-859-5972	GRIP ASSEMBLY,CO	739	18,952	38	499
2540-01-169-5159	HEATER,VEHICULAR	1,474	12,643	18	702
2540-01-162-3834	HEATER,VEHICULAR	1,424	10,402	15	693
1240-01-005-6036	PERISCOPE,ARMORE	1,649	8,048	13	619
3040-00-907-9024	CYLINDER ASSEMBL	3,006	5,148	5	1,030
2920-01-054-0479	REGULATOR,ENGINE	281	4,489	12	374
1025-00-754-5289	EQUILIBRATOR,CAN	919	4,236	8	530

**CHOOSE A VOLUME FOR MORE SYSTEMS**



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